## ABSTRACT OF THE DISCLOSURE

A line slit nozzle for spraying steam is disposed along a diameter of a resist film. Steam containing a mist is sprayed onto a surface of the resist film. The film is thereby peeled off and removed. By using a change in physical properties (swelling, etc.) of the resist film by water, the film is easily and surely peeled off. Breakaway from much resources/energy consumption type techniques is realized. In other words, realized are environment-symbiosis type techniques by which resist films can be removed independently of the quantity of energy and kinds of chemical solvents.